RAB Minutes

NAS North Island
Restoration Advisory Board
May 17, 2001, Meeting Minutes

INTRODUCTION

The seventieth Restoration Advisory Board (RAB) meeting for Naval Air Station (NAS) North Island/Naval Amphibious Base (NAB) Coronado was held on Thursday, May 17, 2001, at the Coronado Public Library from 6:35 p.m. to 7:55 p.m. Mr. Locke called the meeting to order at 6:35 p.m.

RAB ATTENDANCE

Bill Collins, Daniel Cordero, Bob Geilenfeldt, John Locke, Robert Logan, Foster Marshall

PUBLIC/NAVY ATTENDANCE

Mark Bonsavage, Robert Campbell, Anita Craig, Leticia Hernandez, Nancy Lee, Nicole Peacock, Carol Yamane, Jerry Bailey

APPROVAL OF FEBRUARY 22, 2001, MEETING MINUTES

The RAB members approved the February 22, 2001, meeting minutes without change.

MEETING TOPICS

The May 17, 2001, meeting topics were the Site 9 Soil Vapor Extraction with Stream Injection and Free Product Recovery Update, Site 5 Methane Gas Monitoring, Solid Waste Management Unit (SWMU) 80 Remedial Investigation (RI) Work Plan - A New Project, Flower Show Recap, and NAB Soil and Groundwater Background Update.

PRESENTATIONS

Site 9 Soil Vapor Extraction with Stream Injection and Free Product Recovery Update - Bill Collins, SWDIV RPM

Currently, 7,000 gallons of free product have been removed. The site is being prepared for the installation of additional wells, to total 38 steam injection wells and 58 free-product/soil vapor extraction wells. Using this system, steam is pushed into the ground, causing the free product to lose viscosity, warm up, and become mobile enough to be extracted. It is expected to take approximately 2 years to complete the cleanup.

Site 5 Methane Gas Monitoring - Nicole Peacock, Bechtel

Site 5 is located in the southeastern portion of North Island. It served as a landfill from approximately 1945 to 1965, and it is currently the site of a golf course.

Methane gas is odorless, colorless, lighter than air, and formed by the decomposition of organic matter. It is common in swamps, wetlands, peat deposits, and old landfills. The gas moves along the most unrestricted pathway, such as layers of sand, along pipelines, or through underground structures such as a basement.

The rate at which methane is produced is dependent upon the amount of rainfall over time and on the temperature. In cases of high production, methane is collected and used for energy. Production at Site 5 is

too low for collection.

There are hazards associated with methane gas. At a concentration of between 5 and 15 percent methane in air, methane becomes an explosive hazard. Five percent or 50,000 parts per million (ppm) is defined as the lower explosive limit (LEL). Methane gas also can cause asphyxiation in a confined space.

Sensors to measure methane display the concentration in three ways: percent by volume, parts per million, and percent of the LEL. (A concentration of 100 percent of the LEL is 5 percent by volume.)

Methane was detected at the site during the construction of the golf course clubhouse at a level of 10,000 ppm or 1 percent by volume, posing no hazard. Methane monitoring has been ongoing at the site since 1998 as part of the post-closure maintenance. Monitoring occurs around the golf course clubhouse as well as around the perimeter at approximately 43 locations in all. Most of the monitoring occurs at storm drains or manholes, which are natural conduits for methane gas. Some vapor monitoring wells are used as well.

There have been detections at vapor well 1 (VW1), near the clubhouse, with the highest detection there in 1998 or 1999 at just over 6,000 ppm. In this case, Public Works Center (PWC) performed the monitoring with a flame ionization detector (FID), which measures total organic vapors. This means that methane and volatile organic compounds (VOCs) were measured together for the total reading.

In 2000, Bechtel performed monitoring with a methane detector and reported mostly "non-detects" or no detectable amounts of methane. A reading of 0.1 percent appeared briefly but returned to zero almost immediately.

In 2001, PWC collected one round of monitoring. They found results in the thousands, similar to the 1998 detection, in VW1.

Due to the possibility that methane gas could migrate up through the basement, a methane gas detection system was installed in the clubhouse, continuously monitoring for methane by percent LEL (i.e., from 0 to 100 percent of the LEL). The control panel for the alarm is located in the office of the clubhouse restaurant. If concentrations in the basement reach 20 percent of the LEL, a strobe light alarm flashes. If the concentration reaches 25 percent of the LEL, an audible alarm sounds. The staff has been instructed to call the Fire Department and evacuate when the alarm sounds. Bechtel checks and recalibrates the instruments periodically.

SWMU 80 Remedial Investigation Work Plan - A New Project - Robert Campbell, SWDIV RPM, and Carol Yamane, Bechtel

SWMU 80 is a new project at North Island. The project consists of preparing an RI work plan for approximately 7 miles of underground pipeline. The pipeline carried industrial waste through the island and has leaked chlorinated solvents at the joints and connections points. In addition, Operable Unit 20 and Operable Unit 24 are being included in this RI, although they are not part of the pipeline.

Carol Yamane of Bechtel will serve as the project manager. The work plan will be submitted to the lead agency for the project, the Department of Toxic Substances Control (DTSC), for approval. The San Diego Regional Water Quality Board (RWQCB) will provide input on groundwater contamination.

Site history. The industrial waste collection system was installed in phases, going online after construction of the first industrial waste treatment plant around 1972. There are more than 42,000 feet of pipeline with eight lift stations. The collection system transported industrial wastewater from the northeastern part of the base to the waste treatment plant. The wastewater came from aircraft maintenance and repair activities and contained dilute concentrations of metals, phenols, solvents, and rinseate. Generally, wastewater flowed

down slope under gravity, to the treatment plant at the center of the island. When necessary, lift stations pumped the water to the next section of pipe.

In 1989, DTSC performed a Resource Conservation and Recovery Act (RCRA) Facility Assessment to identify sites with possible releases of hazardous waste. The assessment identified SWMU 80 and five of the lift stations, now called SWMUs 45 through 49. Later, a Site Management Plan identified these items as Operable Unit 14 collectively.

In 1994, a second industrial waste treatment plant was built. The addition resulted in modifications to the collection system such as cleaning parts of the pipeline and abandoning sections, which were left in place, as well as removing three lift stations. None of the sections currently being used transport hazardous waste.

Other studies at North Island identified two areas in the northeastern part of the base with solvent plumes in the groundwater. Two such locations are called Operable Unit 20 and Operable Unit 24. Previous investigations suggest that the plumes resulted from releases from the pipeline. This project will determine where there are leaks to clean up.

Project Planning. An Installation Restoration (IR) work plan is being created, and an RI will be performed. The work will encompass the pipeline and the two related Operable Units. It will be determined if undiscovered releases have occurred around the remaining pipeline and lift stations. Data will be gathered to characterize potential risk to humans and the environment. Potential remediation methods will be identified. A Geographical Information System (GIS) package will be prepared in which to store the data collected. The GIS is like a database that can be applied to maps. Groundwater sampling will be performed at Operable Unit 24. The draft plan for this was submitted to regulators and the public recently, with copies available for review at the Coronado Public Library.

Flower Show Recap - Bob Geilenfeldt, RAB Community Co-Chair

Foster Marshall, Carla Fargo, John Locke, Bill Collins, Art Van Rooy, and Bob Geilenfeldt manned the booth at the flower show and were thanked for their efforts. The Navy provided outstanding displays, which captured the attention of those who passed by.

Approximately 160 brochures were handed out. One hundred eighty-three citizens stopped by; 26 expressed serious interest; announcements for the next (i.e., the May 17) meeting were distributed. In spite of the interest shown at the show, no new attendees were at this meeting.

Suggestions to generate interest in the RAB meetings included the following:

- Publishing the meeting information in the newspaper;
- Placing an eye-catching newspaper ad calling for volunteers that appeals to the citizenry instead of being technical;
- Identifying other events that would accommodate a booth, such as the Earth Day celebration;
- Returning to the Coronado Flower Show next year;
- Mailing out fact sheets again.

It also was suggested that names and addresses be collected as opposed to only handing out information. This will allow the committee to contact those who are interested by mail.

Leticia Hernandez, the new Public Participation Specialist for DTSC, was introduced. She expressed interest in assisting Carla Fargo with the outreach to schools in addition to other activities the committee wants to pursue.

Mr. Geilenfeldt asked that the show coordinators, Ann Goodfellow and Carol Cartwright, be sent an official letter of appreciation, including a request to be considered for next year's show. Mr. Collins agreed to submit a request to the Navy to secure the displays again.

NAB Soil and Groundwater Background Update - Mark Bonsavage, SWDIV RPM

There are six sites in question where concentrations of metals in the soil and groundwater are above regulatory thresholds. It was necessary to determine if the concentrations occur as the result of a release or from natural sources.

Navy and Environmental Protection Agency (EPA) documents were used as the framework for how to calculate the statistics from the data. A background data set is collected - typically, 40 samples, each from a different location. Each data element is plotted on a curve, and the highest and lowest data points are evaluated separately. Statistically, most of the concentrations should be similar. A release is identifiable by a large concentration point above the curve. The background concentration can be determined from this data.

In the case of the NAB, results for numerous samples already exist. The existing data was gathered in a database and plotted. In some cases, such as aluminum and barium, an insufficient number of samples had been gathered, resulting in a data gap. More sampling is required to resolve the data gaps; however, using the existing data saved significant amounts of money and time. Some of the sites will be ready for closure without needing clean up, based on the findings. Additional samples will be required at four of the sites.

PUBLIC QUESTIONS AND COMMENTS
Mr. Bonsavage announced EPA project managers attending a conference toured Site 5 and Site 9 on May 9, 2001. The project managers were very impressed with the work being done.

UPCOMING AGENDA ITEMS

- Site 9 Update
- Site 5 Update
- Site 11 Feasibility Study

RAB UPCOMING MEETINGS, YEAR 2001

August 23 (please note that this is a change from the date announced at the meeting) and November 15, 2001.

MEETING ADJOURNED
Mr. Locke concluded the meeting, and the meeting adjourned at 7:55 p.m.